

## **IN THE SPECIFICATION**

Please replace paragraph [0059] with the following marked up paragraph:

**[0059]** A scale  $j \in \{1 \dots J\}$  is assigned to each block of an image of size  $M \times N$ , so that a cost function  $\Lambda$  is maximized,

$$S_{opt} = \arg \max_{S \in \{1 \dots J\}^{M \times N}} \Lambda(S, B) \quad (8)$$

where  $S_{opt}$  is the optimal segmentation map for the entire image,  $S$  is one of the  $J^{\frac{M \times N}{m \times n}}$  possible labelings of blocks of size  $m \times n$ , where there are  $\frac{M/2^j}{m} \times \frac{N/2^j}{n}$  blocks of size  $m \times n$  at level  $j \in \{1 \dots J\}$ , with each block assigned one of the scales in  $\{1 \dots J\}$ , and  $\Lambda(S, B)$  yields the cost given any segmentation  $S$  and any entropy distribution  $B$ .